

Track 2 - Teacher Education/Colleges of Ed/Engin/A&S			Short-term Goals	Long-term Goals
Rec 4	Improve teacher preparation programs and encourage STEM disciplines to enter teaching profession.			
	Improve teacher preparation programs and encourage people with undergraduate and graduate STEM degrees to enter the teaching profession.			
	<p><u>Alternative routes to certification</u>, completion of KTIP, work experience, former postsecondary faculty and retired military. Endorsements in math/science utilizing <u>best practices</u> in teaching. Partner with PSI to better prepare teachers - Teacher Round Tables to discuss what they don't know, need to know to teach. Teach <u>differentiated instruction</u> meeting students at their level through both intervention and differentiation). Include Math/Science Elementary Ed endorsements like exist for Reading.</p>	<ul style="list-style-type: none"> Rethink how we recruit, prepare, and retain STEM teachers (i.e. raise standards, increase access, flexible alternative routes to certification.) 		
	<p>Investigate NSF Noyce, S-STEMS, and STEP designed to increase the number of STEM graduates. Reverse the trend and provide teachers opportunity to work in STEM careers (job share/teaching and STEM work). SKyTeach and U-Teach are both exceptional programs - interface with Know-How-2-Go, i.e. "Know-How-2-Teach" programs.</p>	<ul style="list-style-type: none"> Consider incentives to recruit and retain STEM teachers, including loan forgiveness programs for STEM teachers. 		
	<p>Build navigator system on EPSB web site to inform non-teacher prepared individuals. Use Try-Teaching Program in Kentucky. NKU is currently working with Duke Energy to develop a program to facilitate STEM degreed persons to enter teaching field. Build a bridge from professionals in STEM to facilitate "teaching" in K-12 and expose students to STEM career opportunities, must be innovative offerings (not daily).</p>	<ul style="list-style-type: none"> Consider formal education providers as partners in recruiting students into STEM teaching fields. 		
Rec 5	Revolutionize how STEM subjects are taught, learned, and assessed and implement a statewide research-based STEM curriculum that is aligned with global workforce and academic standards.			

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	End-of-course achievement assessments (Achieve) consideration to create a uniform set of standards for Math/Science. Review current data - facts are known.	<ul style="list-style-type: none"> Integrate a comprehensive, standardized, internationally benchmarked P16 STEM curriculum and make it accessible to all students through the latest instructional techniques and technologies and available through dual credit and AP mathematics and science courses. Emphasize depth of learning as well as breadth of learning in STEM subjects. 		
	* A number of studies support a strong grounding in HS mathematics correlates powerfully with access to college, graduation from college, and earnings in the top quartile of income from employment.			
	Workgroup II.2. Conf Call Notes: 9/15/08			
	Participants: Phil Rogers, Chair: Blaine Ferrell, Sue Cain, John Yopp, Kristy Fleming, Linda Sheffield.			
	Yopp to report out on Sept. 30.			
10/16/08 Priority Setting: contributing: Phil Rogers, Linda Sheffield, Sue Cain, Ruth Webb, John Yopp, Nancy Martin, LL, PW.				
	Priorities	Comments		
1	Encourage initial certification specialization of elementary teachers in Math and Science. An example is the U-Teach program. Establish per EPSB's math recommendations endorsements for math and science in K-12 educaion.	a. Consider Best in Class loan forgiveness for funding.		
2	Review admission to teacher education postsecondary education programs. Evaluate the teacher education entry requirements. (John Yopp will question ETS for information)	a. Continue to review alternative routes to teacher education for STEM disciplines.		
3	Review curriculum for dual credit/AP courses. Assure high standards for dual credit (i.e. must be college level)/AP courses and that they are available to all Kentucky students.			
4	The Core Content for mathematics in grades K-12 should be revisited to consider the NCTM Curriculum Focal Points for Prekindergarten through Grade 8 Mathematics and the NCTM Focus on High School Mathematics			